

## CLAIMS

### What is Claimed is:

1. A method for operating a server to improve bandwidth efficiency in a computer network, wherein the server is operable to transmit files between a memory of the server and destinations on the computer network through a communication link having a finite bandwidth, wherein the files are distinguishable by type and the server is provided with a rule set for prioritizing transmission of files by type, the method comprising:

monitoring a bandwidth usage of the communication link;

triggering application of the rule set when the bandwidth usage exceeds a threshold amount, the threshold amount being determined relative to the finite bandwidth

distinguishing between the files according to type; and

prioritizing transmission of the files according to type and according to the rule set.

2. The method of Claim 1, wherein the distinguishing step further comprises assigning a type to ones of the files according to a file name of the ones of the files.

3. The method of Claim 2, wherein the distinguishing step further comprises assigning the type to the ones of the files according to a file name extension of the ones of the files.

4. The method of Claim 1, wherein the distinguishing step further comprises crawling through a memory of the server to identify associated groups of files, wherein each of the groups of files is a group configured to be aggregated into a larger file.

5. The method of Claim 1, wherein the distinguishing step further comprises crawling through files stored in a memory of the server to identify files that do not contain hyper links and are not identified by hyperlinks in other files in the memory of the server.

5 6. The method of Claim 1, wherein the prioritizing step further comprises selecting a rule from the rule set according to the bandwidth usage.

7. The method of Claim 6, further comprising broadcasting the rule selected from the rule set to a second server connected to the server.

8. The method of Claim 1, wherein the prioritizing step further comprises  
10 applying a rule that selectively slows transmission of the files according to type.

9. The method of Claim 1, wherein the prioritizing step further comprises applying a rule that selectively slows transmission of the files having at least one property selected from a .mp3 filename extension, being located in a directory with a name containing the term "mp3", or being located in a directory with a name containing the term "warez."  
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10. The method of Claim 1, wherein the prioritization step further comprises slowing transmission of selected files from the server, wherein the selected files are determined by application of the rule set.

11. A system for operating a server to improve bandwidth efficiency in a computer network, the system comprising:

a server operable to connect to a computer network through a communication link having a finite bandwidth; and

5 program instructions in a memory of the server operable to transmit files between a memory of the server and destinations on the computer network through the communication link, wherein the files are distinguishable by type and the server is provided with a rule set for prioritizing transmission of files by type, the program instructions operable to perform the steps of:

10 monitoring a bandwidth usage of the communication link;

triggering application of the rule set when the bandwidth usage exceeds a threshold amount, the threshold amount being determined relative to the finite bandwidth

distinguishing between the files according to type; and

15 prioritizing transmission of the files according to type and according to the rule set.

12. The system of Claim 1, wherein the program instructions are further operable to perform the distinguishing step further comprising assigning a type to ones of the files according to a file name of the ones of the files.

20 13. The system of Claim 2, wherein the program instructions are further operable to perform the distinguishing step further comprising assigning the type to the ones of the files according to a file name extension of the ones of the files.

25 14. The system of Claim 1, wherein the program instructions are further operable to perform the distinguishing step further comprising crawling through a memory of the server to identify associated groups of files, wherein each of the groups of files is a group configured to be aggregated into a larger file.

15. The system of Claim 1, wherein the program instructions are further operable to perform the distinguishing step further comprising crawling through files stored in a memory of the server to identify files that do not contain hyper links and are not identified by hyperlinks in other files in the memory of the server.

5 16. The system of Claim 1, wherein the program instructions are further operable to perform the prioritizing step further comprising selecting a rule from the rule set according to the bandwidth usage.

10 17. The system of Claim 6, wherein the program instructions are further operable to perform the step of broadcasting the rule selected from the rule set to a second server connected to the server.

18. The system of Claim 1, wherein the program instructions are further operable to perform the prioritizing step further comprising applying a rule that selectively slows transmission of the files according to type.

15 19. The system of Claim 1, wherein the program instructions are further operable to perform the prioritizing step further comprising applying a rule that selectively slows transmission of the files having at least one property selected from a .mp3 filename extension, being located in a directory with a name containing the term "mp3", or being located in a directory with a name containing the term "warez."

20 20. The system of Claim 1, wherein the program instructions are further operable to perform the prioritizing step further comprising slowing transmission of selected files from the server, wherein the selected files are determined by application of the rule set.